FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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OMB APPROVAL									
OMB Number:	3235-0287								
Estimated average	burden								

0.5

hours per response:

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan

for the purchase or sale of equity securities of the issuer that is

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1(c). See Instru		*		2 Januar Nama and	Tieleene	u Tuo d	ing Comphal		5 Dala	tionahin of Danastin	na Domony(a) to	
1. Name and Address of Reporting Person*  O'NEIL PATRICK R.  (Lost) (First) (Middle)				2. Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC [ IONS ]						tionship of Reportir all applicable) Director Officer (give title below)	10% (	Owner (specify
(Last) (First) (Middle) C/O IONIS PHARMACEUTICALS, INC. 2855 GAZELLE COURT				3. Date of Earliest Tr 02/02/2024	ansactio	on (Mc	onth/Day/Year		EVP CLO & General Couns		sel	
(Street) CARLSBAD CA 92010 (City) (State) (Zip)				4. If Amendment, Da 02/02/2024	te of Ori	ginal	Filed (Month/I	6. Indiv	vidual or Joint/Group Filing (Check Applicable  Form filed by One Reporting Person  Form filed by More than One Reporting  Person			
		Table I - I	Non-Derivati	ve Securities A	cquir	ed, [	Disposed (	of, or l	Beneficially	Owned		
Date		2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and			5. Amount of Securities Beneficially Owned Following Reported	6. Ownership Form: Direct (D) or Indirect (I)	7. Nature of Indirect Beneficial Ownership (Instr. 4)	
					Code	v	Amount	(A) or (D)	Price	Transaction(s) (Instr. 3 and 4)	(Instr. 4)	(111501. 4)
Common Stock			02/02/2024		S		1.995(1)	D	\$49 6738(2)	48 627(1)	D	

## Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)			5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				

## **Explanation of Responses:**

- 1. The original Form 4 filed on February 2, 2024 reported 1,961 restricted stock units sold by the reporting person which has been revised by this amendment to reflect the actual amount of shares sold and beneficially owned by Mr. O'Neil.
- 2. The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$49.60 to \$49.80 inclusive. The reporting person undertakes to provide to Ionis Pharmaceuticals, Inc. any security holder of Ionis Pharmaceuticals, Inc. or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the ranges set forth in footnote (2) on this Form 4

09/04/2024 Patrick R. O'Neil

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- \* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.